MOTION CUT WEEK 2

QUESTION: 1) Understanding Input Handling: Learn how to take user input in Python? **PYTHON CODE:** # Prompt the user for input text = input("Enter a text: ") # Split the text into words based on whitespace words = text.split() # Count the number of words word_count = len(words) # Print the word count print("Number of words:", word_count) **OUT PUT:** Enter a text: Hello world, this is a test. Number of words: 6 2) String Manipulation: Explore string manipulation techniques for text processing? **PYTHON CODE:** def count_words(text): # Split the text into words based on whitespace words = text.split() # Return the number of words return len(words) # Example usage sample_text = "Explore string manipulation techniques for text processing."

OUT PUT:

text = "Explore string manipulation techniques for text processing."

word_count = count_words(sample_text)
print(f"Number of words: {word_count}")

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number_of_words = count_words(text)
print("Number of words:", number_of_words)
Number of words in the text: 6
3) Function Creation: Practice creating functions in Python for modular code?
PYTHON CODE:
def count_words(text):
  Function to count the number of words in the provided text.
  Parameters:
  text (str): The text string to count words in.
  Returns:
  int: The number of words in the text.
  words = text.split()
  return len(words)
# Example usage
user_input = input("Enter the text: ")
word_count = count_words(user_input)
print(f"The number of words in the text is: {word_count}")
OUTPUT:
The number of words in the text is: 5
4) Basic Control Flow: Implement basic control flow structures to control the
program's logic?
PYTHON CODE:
def count_words(text):
  # Check if the input text is empty
  if not text.strip():
    return 0
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# Split the text into words based on whitespace
  words = text.split()
  # Count the number of words
  num_words = len(words)
  return num_words
# Example usage
input_text = input("Enter the text: ")
word_count = count_words(input_text)
print(f"Number of words: {word_count}")
OUTPUT:
Enter the text: Hello world!
Number of words: 2
Enter the text: Hello world!
Number of words: 2
Enter the text:
Number of words: 0
5)Output Display: Display the word count as the output of the program.run
python code number of words in a given text?
PYTHON CODE:
# Function to count the number of words in a text
def count_words(text):
  words = text.split() # Split the text into words
  return len(words) # Return the number of words
# Input text
input_text = input("Enter the text: ")
# Output the word count
print("Number of words:", count_words(input_text))
OUT PUT:
Enter the text: Hello world! This is a test.
```

Number of words: 6